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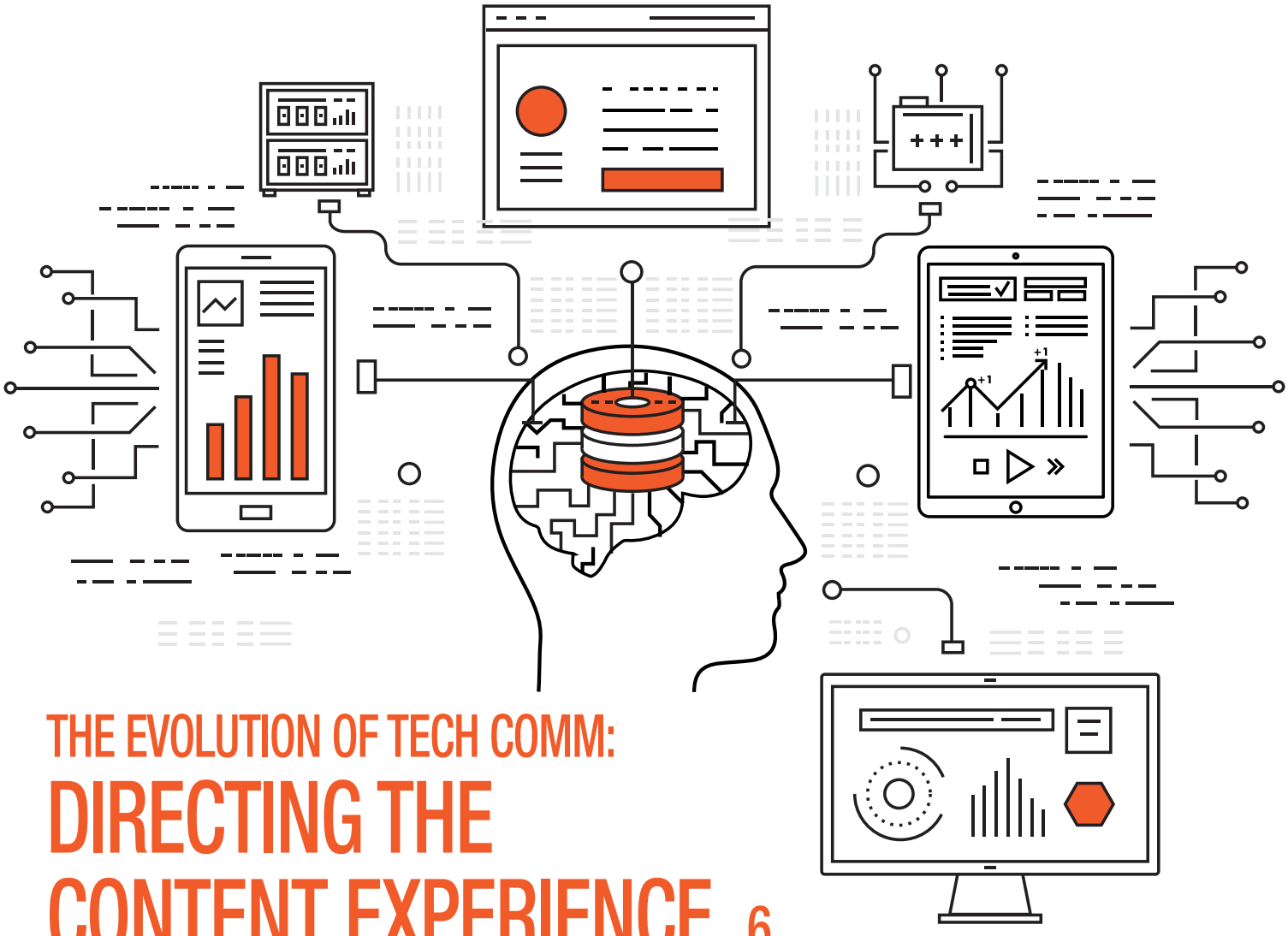

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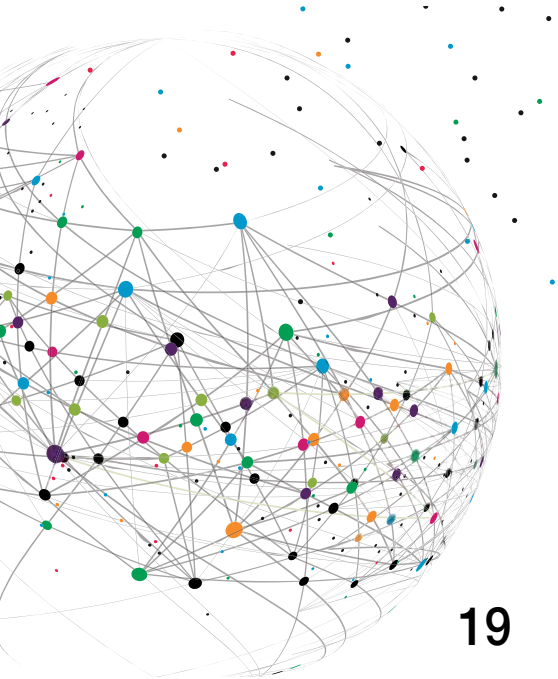

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A Note from the Editor

WHAT A GREAT WAY to start off a new year—peering into the future of technical communication! As we make our resolutions and put plans in place for a new year of wild success, let's start with the end in mind (á la Stephen Covey's *7 Habits*) by pulling some vision from the visionaries!

Jack Molisani, this issue's guest editor, has done just that. His five authors have painted a picture that is filled with opportunity for content professionals of all specialties, backgrounds, and interests. I hope you find the view of the future as intriguing and inspiring as I did.

Jack is the president of ProSpring Technical Staffing, an employment agency specializing in technical writers and other content professionals. He's the author of *Be The Captain of Your Career: A New Approach to Career Planning and Advancement*, which hit #5 on Amazon's Career and Résumé Best Seller list. He also produces the LavaCon Conference on Content Strategy and TechComm Management.

When he's not scouting venues, leading parades, or singing karaoke—all in the name of the LavaCon experience—he organizes charitable service projects (like home building with Habitat for Humanity and playing charity BINGO), SCUBA dives, and posts fab foodie tidbits on Facebook. You can reach Jack on Twitter *@jackmolisani*, LinkedIn at *https://www.linkedin.com/in/jackmolisani/*, or his websites: *http://ProspringStaffing.com* or *https://lavacon.org*.

Thank you to Jack for editing this wonderful issue, and to Ari Hoffman, Cruce Saunders, Seth Earley, Oded Ilan, and Annik Stahl for sharing their insights for our collective futures with *Intercom* readers. Thanks, also, to Allen Brown for his My Job contribution, and to Scott Abel for his very on-theme Meet the Change Agents column: *An Interview with Christopher Noessel*. (I had the pleasure of meeting and talking with Chris at the Information Development World conference in November 2017, and he is definitely future-focused *and* a change agent!) Be sure to check out the Society Pages for news about the 2018 Summit and the final slate of candidates for the upcoming Society elections.

Finally, thanks to Liz Pohland, STC Chief Executive Officer, the STC staff, and the STC Board of Directors for allowing me to captain this amazing *Intercom* ship. As Dr. Seuss said, "Oh, the places you'll go!" I'm very much looking forward to all of the places that you, dear reader, and I will go together in the future!

Andrea Ames

— Andrea L. Ames
andrea@idyllpointllc.com

From the Guest Editor

WHEN ANDREA AMES asked me to be the guest editor of the *Intercom* issue on The Future of Technical Communication, my first reaction was, "Sure! Let me look into my crystal ball and give you my best guess!"

Instead, I compiled a list of industry experts who are on the cutting edge of content development and asked *them* where they thought technical communication as a field was headed, how we (as content professionals) can prepare for it, and what the opportunities are for us to expand our sphere of influence as the industry evolves.

In this issue, we'll look at the future of tech comm and our role in the greater content development ecosystem.

First, Ari Hoffman, success fanatic at MindTouch, discusses the evolution of tech comm, how we evolve from just technical writing into the broader role of a Director of the Content Experience.

Cruce Saunders, Principal and Founder of [A], discusses how to prepare for the new multi-channel, multi-modal world of content development.

Seth Earley, CEO of Earley Information Science, addresses how artificial intelligence and chat bots will affect content delivery.

Oded Ilan, Chief Marketing Manager at Iridize, will delve into the world of analytics and personalized content: how personalized content opens the door to greater opportunities for technical communicators.

Finally, Annik Stahl, a content manager at Amazon.com, will address the opportunities and challenges of writing for a global audience.

As we move forward as a profession, we must constantly monitor SWOT (Strengths, Opportunities, Weaknesses, and Threats) and positon ourselves to seize advantages that open before us.

One of my favorite quotes is from the seagulls in the movie *Finding Nemo*, who when faced with a (feeding) opportunity yell, "Mine! Mine! Mine!Mine!Mine!"

Are you letting opportunities to make fundamental customer experience changes pass idly by, or are you seizing the opportunities and declaring "Mine! Mine! Mine!Mine!Mine!"?

— Jack Molisani
jack@lavacon.org

Intercom Editorial Calendar 2018

January/February 2018
Theme: The Future of Technical Communication
Guest edited by Jack Molisani
Submission due date: 12/15/2017
Ads due: 1/2/2018

March/April
Theme: The Healthy Content Organization
Submission due date: 1/10/2018
Ads due: 2/1/2018

May/June
Theme: Leadership
Submission due date: 3/10/2018
Ads due: 4/2/2018

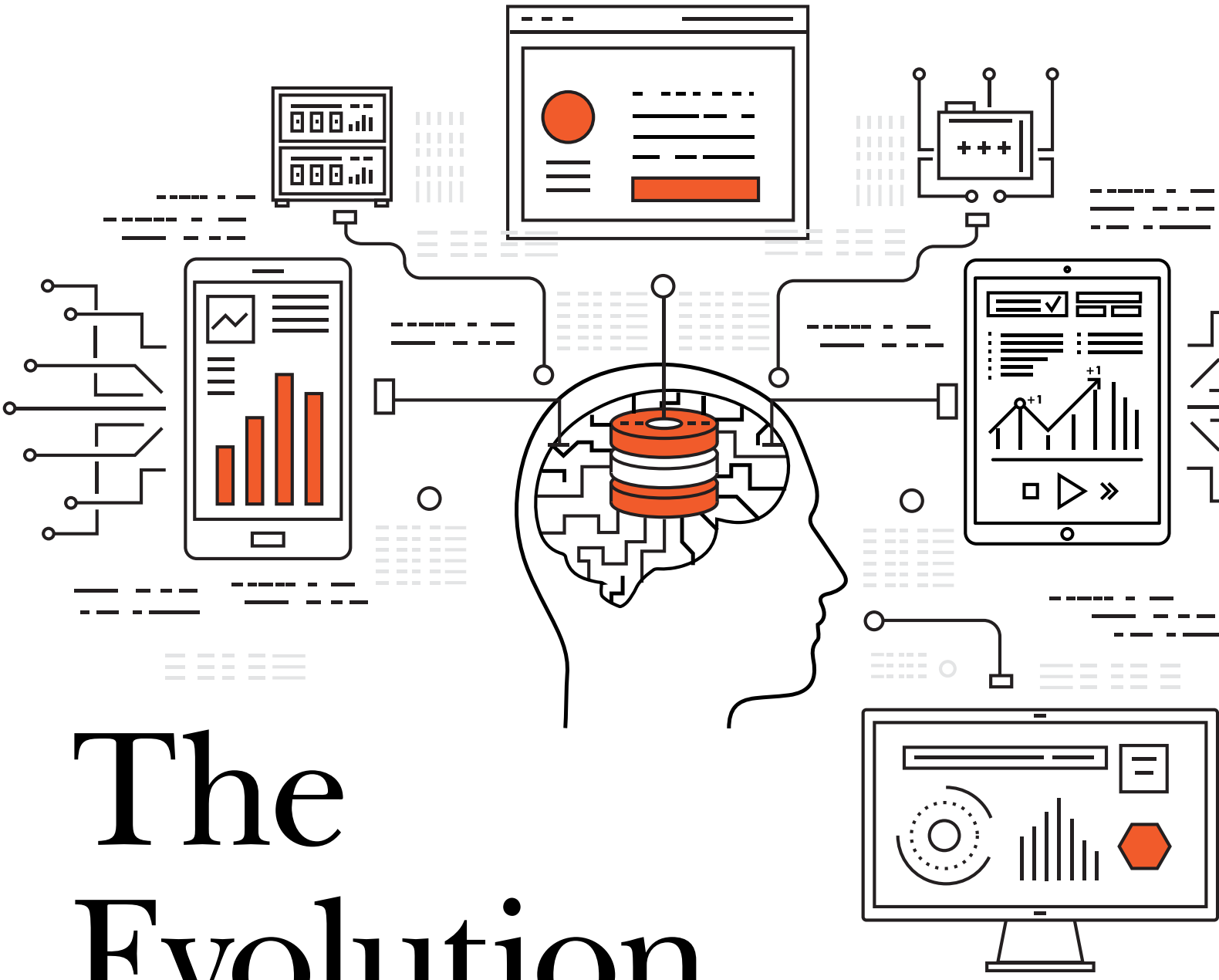
July/August
Theme: The State of Technical Communication Education
Guest edited by Kirk St.Amant
Submission due date: 5/10/2018
Ads due: 6/1/2018

September
Theme: Measuring the Value of Content
Submission due date: 7/10/2018
Ads due: 8/1/2018

October
Theme: Understanding Audiences and Their Tasks
Submission due date: 8/10/2018
Ads due: 9/4/2018

November
Theme: The Relationship of Content and Design
Submission due date: 9/10/2018
Ads due: 10/1/2018

December
Theme: The State of the Technical Communication Industry
Submission due date: 10/10/2018
Ads due: 11/1/2018



The Evolution of Tech Comm:

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Directing the Content Experience

By ARI HOFFMAN

CONTENT HAS EVOLVED past the point of a printed manual. We know that content doesn't just live in one format (PDF, Web hosted, FAQ, etc.) or one place. What we are slower to realize, however, is that content has grown beyond "something that is read" and into being part of the customer experience, cascaded across all steps of the customer journey.

The days of long technical documents are nearing an end, at least as the primary means for how that content is consumed. Think about it—where is most of your organization's content being consumed right now, at this very moment? Certainly it is not in a five-pound printed manual pulled from a dusty shelf!

Printed user manuals moved onto a desktop screen, the desktop turned into a laptop, the laptop into a smartphone, then into a smartwatch, washing machine, VR headset, or even an Alexa on your customer's night stand. We need to stop "writing manuals" and start crafting usable, findable micro-content.

Real-Time Content Consumption Turns to Real-Time Content Creation

Terms like "micro-content" or "micro moments" are how customers, field service reps, support agents, and even your third-party vendors are looking to self-serve. Micro-content enables you to deliver your information (onboarding materials, training guides, user manuals, break fix articles, and even best practices) into a tailored form that considers the end user's needs (both what they want and on what device they want it).

Your publishing system should know if the consumer is a field rep, a new customer, someone looking into purchasing your product, or even a lost customer. Micro-content enables you to pull information from multiple sources, bridge content silos, fill content gaps—all in real time for each individual consumer. That information delivery (how and when it is pulled from different silos and compiled in a cohesive manner in real time) will be automated, if it isn't already.

A keynote speaker at a recent content strategy conference asked the audience, "True or false? Automation and Artificial Intelligence will eliminate content jobs." The answer was false, but probably not in the way you were expecting.

Gone are the days of semi-annual or quarterly product releases. With Agile development and global development teams, deadlines have gone from months to weeks to days. However, content professionals are no longer judged by how much content they can madly crank out to meet crazy back-to-back deadlines. Instead, progressive companies are

assessing how content contributes to the larger company objectives, such as new customer acquisition.

Content professionals should spend time analyzing how their content is consumed. Metrics like page views, time on page, click-through-paths, knowledge journeys, search terms, meta tags, and ratings are insights that inform you on how your customer is not only consuming your information, but how they are experiencing it.

The content we produce has become integral to the total customer experience. Why? Because *how* your customer experiences your content can expedite them across the customer journey faster than the simple act of consuming it.

Content Experience Evolves with Your Customer

Moving forward, we need to move away from old-school functions such as "technical writers" and become "content experience professionals" who focus on the customer first and foremost. It is an "Outside-In" approach where understanding how customers are experiencing content continuously optimizes the way your content is created, delivered, consumed, and updated. The channels in which that content lives will evolve and so will the need for it to be adaptable and trackable. So content jobs will always exist, but they will evolve as rapidly as the customers' needs do.

Analyzing content metrics is the key driver in your ability to continuously serve your customers' needs. The metrics will be based on high-value objectives, with the three most prominent being (in this order):

1. Renewal and expansion
2. New customer acquisition
3. Brand engagement

From these three objectives, there is a host of ancillary metrics needed to reach your goals. If someone is not measuring those three parts of the customer journey, you need to start doing so immediately. This is how you protect the future value of your position. If you don't, you will find yourself quickly becoming obsolete. For more information, read about the Five Irreversible Trends (see References).

The Director of Content Experience Emerges

Considering how critical content is in the total customer experience, a Director of Content Experience is needed to translate management's vision into a strategy that can be refined and carried out down the chain of command in a company's Content Experience department, tying and unifying all content the company produces across all departments and silos.

[H]ow your customer experiences your content can expedite them across the customer journey faster than the simple act of consuming it.

The Director of Content Experience is responsible for understanding the company's vision and goals, strategizing on how content helps attain those goals and monitoring reports on KPIs (key performance indicators) to fulfill that strategy.

I had the pleasure of recording a webinar where Jack Molisani, Executive Director of the LavaCon Conference and Aaron Fulkerson, CEO of MindTouch, break down the drivers of this content trend, how to adjust for it, and where it is going in the future.

The rate at which we are automating content is growing exponentially, but there will always be a need for the human understanding of where and how the customer experiences that content.

Get ahead of the change! Don't fight it to protect antiquated processes, and don't sit on a sinking ship because you spent so much money building it. It's time to focus on your customer's experience, so get (or better yet, become!) a Director of Content Experience and make sure your company steers into happy customer waters.

ARI HOFFMAN *(*arih@mindtouch.com*) prioritizes customer success at the heart of all business endeavors. As the official Success Fanatic at MindTouch, Hoffman focuses on actionable insights that increase customer success rates while deepening core relationships. Brought in for his collaborative approach to business and his influence in the community, he has dramatically expanded and enriched the MindTouch customer/partner base. From Shark Tank to the FedEx Small Business Grant Contest and Dream Big America Challenge, Hoffman has seen it all. Connect with him on Twitter* @arigobie, *on LinkedIn* https://www.linkedin.com/in/arijhoffman/ *or on the Web at* https://mindtouch.com/resources/author/arihoffman.

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A New Content Order for the Multi-Channel, Multi-Modal World

By CRUCE SAUNDERS

TODAY'S THRIVING ENTERPRISES recognize the value of content and the role it plays in the customer experience. Consumers now expect highly relevant, timely, personalized content at all touchpoints of the customer journey, on any device or interface, across any and all channels of their choosing. Organizations that successfully deliver on these expectations reap the financial rewards and become leaders in their industries, while those that do not struggle to keep up with the rapid rate of change we all see around us.

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Content constantly evolves, driven by consumer demands and needs, and the channels for delivery are seemingly endless. User interfaces (UIs) long ago leapt beyond traditional screen-driven interactions. Today, we have conversational UIs like chatbots, voice search and voice command, automated content interactions, and rich interactive content in the form of virtual reality, wearables, and the larger world of content everywhere. Content formats range from micro-content to videos and podcasts, to apps, email, mobile push notifications, and wikis. Truly personalized customer experiences tailored to the individual are now also possible thanks to an increasingly sophisticated understanding of customer context, in the form of customer data platforms that combine customer signals into a store of big data, harnessed through machine learning.

These technological advancements all improve the customer experience. They reduce the amount of effort required to find and act on information and manage transactions. They save time; they blur the barriers between humans and devices; and they make the overall digital experience more inviting, appealing, and entertaining. They also enable us to automate time-consuming and costly tasks, create a more consistent brand presence across multiple channels, and build more detailed customer profiles for improved targeting and messaging across sales and support journeys.

The Convergence of Marketing and Technical Communication (Marcomm and Techcomm)

Progress is not without its challenges. Marcomm and techcomm teams are now confronting the complexities of content integration across platforms (an alphabet soup including CCMS, CMS, DAM, CEM, CRM, and ERP), and it is important that we find a way to ensure a smooth content distribution process powered throughout the disparate systems.

Marcomm and techcomm each address structure in their own ways and have historically taken different but similar approaches to naming, labeling, managing, and reusing content. While marcomm is moving into customer experience management platforms (weaving together content strategy, structured content for Web content, schema.org, Open Graph, and other public markup schemas), techcomm has developed and defined components of structured content types in the form of DITA (Darwin Information Typing Architecture, an XML-based open standard for structuring, developing, managing, and publishing content).

Similar to marcomm's structured content models, DITA separates content into topics, allowing reuse across numerous contexts and scenarios with applications both in digital and print environments. Both marcomm and techcomm deal with structured content, and although they do so in different ways, they both ultimately strive to make information more useful and accessible to users.

Thus, we all face the same big challenges when creating, distributing, and reusing content. We are charged with the task of creating intelligent content that is ready to serve the demands of new and yet unimagined interactive channels.

The Growing Content Challenges Most Enterprises Face

Today, most companies, organizations, and institutions struggle to keep up with content demands and expectations. Consider the sheer volume of information that must be distributed across large populations and multiple channels—for healthcare providers, schools and higher education, government, financial services, and nonprofits, to name a few—that's a lot of content! Unfortunately, rather than tackle the content challenges that create friction within our organizations head on, we instead employ short-term solutions that result in higher costs and wasted time in the long run.

Working toward leaner, smarter processes that take advantage of things like automation and customer experience (CX) platforms helps eliminate these costly barriers. Pre-sales, marketing, and post-sales content creators need to work together to build the best possible customer experience to ensure growth and customer retention. But how do we get there?

The Answer: Structured Content and The Master Content Model

Structured content, combined with semantics to become *intelligent content*, adds order to content in consistent and predictable ways that enables machines to work with it in ways that optimize the human value of the content. Content is organized by *type*, which can be an article, news story, product description, or podcast, to name a few. Each content type is broken down into *content elements*, such as a headline, sub-headline, summary, media file, or more complex content objects that contain conditional logic and validation. Metadata layers are then added to the content types and elements, which gives the content management system an infinitely flexible and useful set of additional dimensions. (Read *Metadata Basics for Web Content: The Unification of Structured Data and Content* by Michael Andrews for an excellent deep dive into metadata.) When content is structured and enriched with metadata, it can be transformed, reused, and adapted for many different "views," also known as renderings or presentations, that interact with customers.

A *master content model (MCM)* ties everything together by defining the relationships between content types and elements across systems, variants, and channels. It also defines the content entities and their relationships. The MCM is both a tactical store of structural norms and a strategic synthesis of the knowledge domain of the content itself. An MCM is "one schema to rule them all" within an enterprise.

At [A], we have seen the MCM create enterprise value during its creation as well. It creates a meeting point for collaboration. Joe Gollner, a pioneer in the field of engineering content, and I have used it as a framework to combine our approaches from techcomm and marcomm into coherent application.

The existence and application of an MCM significantly reduces the friction often experienced in creating, managing, and publishing content. A content model should specify the technical, functional, and layout requirements of each element, such as character limits or rules for elements, field types, validation logic for each element, mappings to schema.org and other standards, and so on. By representing publishing variants for elements, it should also define opportunities to dynamically connect and reuse content.

In essence, comprehensive content modeling injects static content with enough technical intelligence to make it interactive and dynamic. This process can then be used in applications like chatbots, IoT (Internet of Things) devices, and voice-controlled AI assistants. The MCM simplifies the development of content tools, apps, and APIs. Even further, if paired with the context provided by a CX database, content can be largely automated and used to generate real-time personalization, tailored email campaigns, and more.

The Benefits of a Well-Crafted Content Model

Structuring content within a well-defined content model makes content scalable, reusable, adaptable, and measurable. A unified Master Content Model (MCM) fortifies content by making it "technology-proof"—no matter what new social media platform, trendy wearable, or mobile device comes out next, structured content is already equipped to handle it. A MCM is not only the content relationship diagrams or the type definitions, but includes other material that makes it a functioning part of the organization, including:

- The subject domains, ideally organized into an *integrated domain model*, embodying the semantic representations applied to knowledge assets
- An *inventory of the existing content types*
- An identification of *planned or envisioned content types* (including potential enhancements on currently existing content types), such as will be needed to support new information products
- The current and desired *customer journeys* if available, as an optional input used to reality-test models against a customer lifecycle
- Current and planned *systems, process diagrams, and documentation*
- *Data models*/template definitions for current and planned content-supporting systems
- The current and planned *output formats and structures*
- Representative examples of existing *content artifacts*, including source MS Word documents, data exports from authoring/management environments, and output publications such as the rendered Web pages and printed brochures (PDF)

Well-structured, Leveraged Content Is Valuable

Content that does not generate value is a waste of time and money. It has a one-time cost of creation, but in order to continually grow its return on investment, it must generate positive impressions and interactions with humans and robots. As content assets grow impressions, they decrease their effective cost. This is the lynchpin of making our content an *asset* and not an *expense*. Structured content and content modeling give our content assets the power to decrease effective costs while reaching the *right* audience at the *right* time with relevant content interactions. It is this velocity of content throughput and distribution that increases return on investment for pre-sales *or* post-sales content.

Where We Go From Here

Leveraging a master content model does not mean that all content must be in a single content repository, nor does it require having a single authoring environment. A master content model means having one master framework that organizes the structure of our content in all the authoring systems and repositories across an enterprise function (or a whole enterprise!).

Best of all, it's not necessary to model every domain or to tackle all content at once; our organizations are too large and too complex to reasonably achieve a normalized content structure quickly. Instead, we start with a small, manageable piece and expand from there. For example, start with defining one specific outcome that would add value to your business—a personalization scenario, an integration point, or a customer journey. Create a model specifically tailored for that outcome, and then align authoring systems to achieve the desired results.

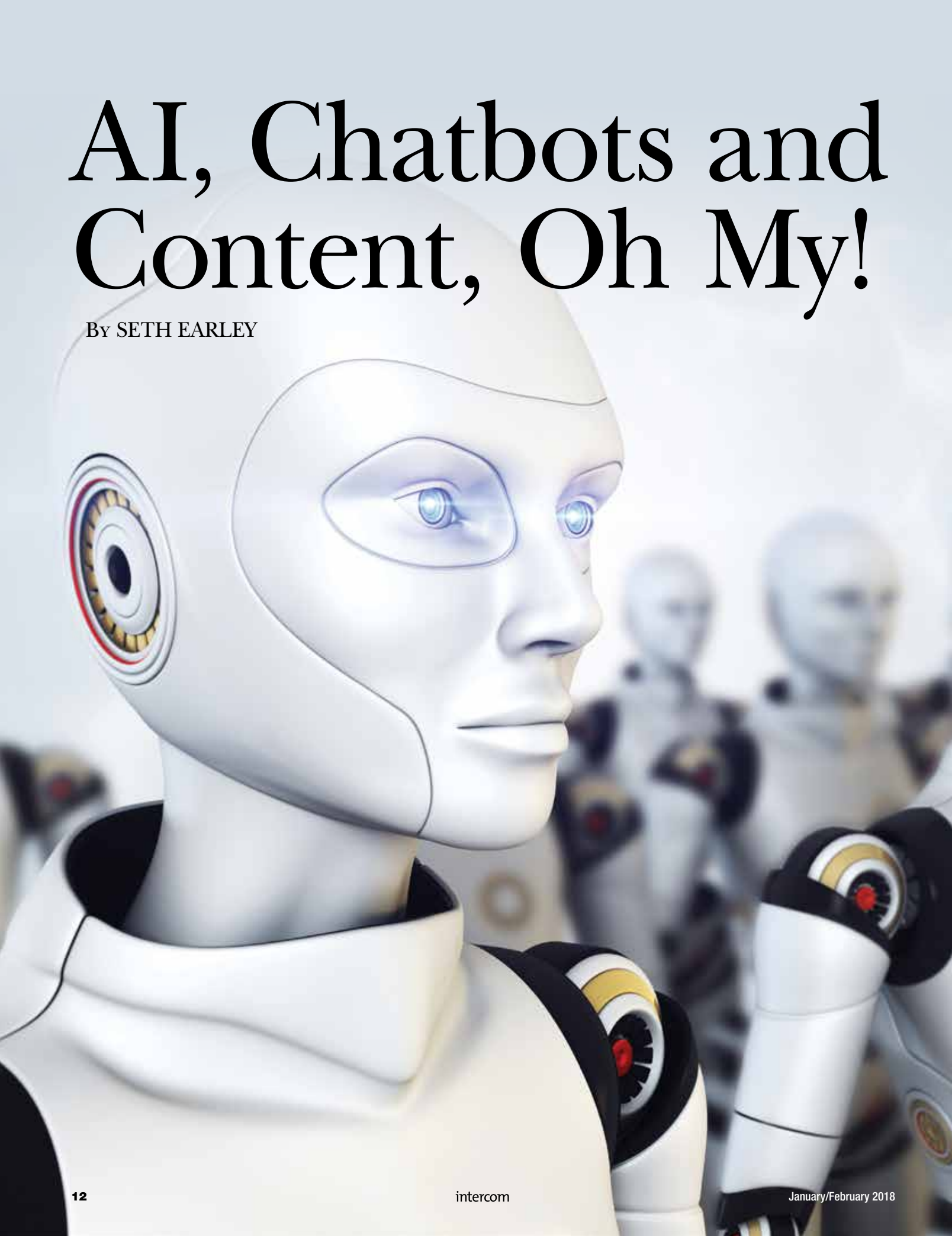
The most difficult aspect of a structured content initiative is the organizational change. That's why [A] has built a practice that specializes in strategically building structured content, content engineering disciplines, and content models and related publishing processes into organizations. But the know-how cannot be outsourced forever. Enterprise leaders need to start building internally driven content intelligence capabilities to manage content structure and semantics across the publishing lifecycle, and align technology and delivery.

The future of content is here. Our organizations need a new content order internally to meet a multi-channel, multi-model world head on.

CRUCE SAUNDERS (c@simplea.com) *is a Content Engineer and Founder of [A]. He writes and speaks regularly on intelligent content systems and the evolution of content technology. To learn more about the Master Content Model, visit [A]'s resources for engineering intelligent content systems and watch Cruce's keynote, "Evolving the New Content Order," delivered recently at LavaCon 2017. Follow him on Twitter* @mrcruce.

AI, Chatbots and Content, Oh My!

By SETH EARLEY



(or Technical Writers Are Doomed—to Lifelong Employment)

Tatiana Shepeleva/shutterstock.com

ARTIFICIAL INTELLIGENCE (AI) and chatbots are the current technologies du jour. Just like big data that preceded them and the rage around predictive analytics, we are once again enjoying a period of heightened expectations and overhyped reality.

The greatest challenge in actually using any of these emerging technologies is still the same—understanding and clearly defining the business need, and having the right data and content to fuel the technology engine. Progress is being made, despite the atmosphere of hype. More prospective users are looking carefully at the purpose of the AI or chatbot, and considering how to support its operation. Even in the past several months, I've seen an evolution in understanding.

For some time, the AI vendors claimed that all you had to do was "train the AI," but never defined exactly what that meant. "We need more training," and "We need the right learning content," were the often-repeated statements from developers that accompanied change order requests and additional funding requirements. Now, many companies are aware that chatbots are channels to content and data and realize that AI is actually a content delivery platform—that the magic is in how the content is structured and rationalized.

However, they still have no idea how to decide what to publish or how to structure it. Anything on a website that is customer-facing would be fair game, but what about a policy and procedure manual for entering employee payroll data? And what about legacy content?

Most companies have never done a content inventory, and there is likely no Director of Content Experience who has any insight into which silos contain what content. Where does a company even begin?

Your company may produce all kinds of content—technical product documentation, instructional content, and support information—but is now being faced with investigating machine-based content delivery, such as chatbots.

Are you intrigued and excited, while also feeling panicked and terrified? Are you afraid for your job and overwhelmed at being asked to do one more thing in addition to an already overloaded day job?

Relax, take a deep breath. Pause. Count to 10. OK, feel better? Good!

Now that that's over, let's take a clear look at the situation. The reality is that most organizations have checked the box when it comes to content. Regulatory requirements have forced them to create and organize content. The products they sell are now well documented, and various content functions, such as content marketing and technical publications, fulfill that requirement.

However, companies do not always scrutinize the value of the content beyond those requirements. I once worked with a Medicare administrative contractor (a "MAC," which is an insurance company that processes Medicare claims) that employed 20 writers to produce enormous amounts of content. In a workshop to structure and tag content, I

held up a piece of information and asked, "Who uses this? What's the purpose? Why should someone read it?"

I was answered with blank stares from across the room. No one had asked those questions before. They couldn't tell me why someone needed to read the content. They created because they were supposed to create content. That was their job. A lot of other content may not be a regulatory requirement, but it is needed for customer service and that content, in contrast, is not well organized or structured to facilitate its use.

Why do we create content in the first place (other than to comply with a regulation)? The answer should be, "To solve a problem." Why do people have problems? Usually because something is not designed correctly. For example, customers call support reps because something is broken. We need the help desk because we can't complete a task. We look things up because we need an answer. And what we get instead is a list of documents—tens, hundreds, thousands of results, some of which are hundreds of pages long—when what we really want is an answer.

Ideally, chatbots help provide these answers. Chatbots are channels to content and information to solve specific problems. They are not magic, and they require that we look at the needs of the user in a new light. We have to understand their journey in detail. We need to know what they're trying to accomplish and what gets in their way.

Organizations are realizing this the hard way while they're spending millions of dollars on AI technologies that are fated to fail, because the business has not thought through these fundamental questions. Moreover, they are hearing from vendors who say they can figure it out.

The vendors have the ear of executives and say, "Give us six months, $2 million dollars, and all of your content, and we will give you something that will solve your problems." I've seen this approach fail miserably, over and over, because executives don't realize that they already have, in their own technical writing organization, the talent to solve these problems.

One aspect of AI that is often overlooked is the role of the technical writer. Amidst the appeal of new technology, technical writers serve a vital role in development of AI applications, including chatbots, by being the subject experts most equipped to address the content requirements of chatbots. I'm giving a keynote at the Information Architecture Summit coming up in March in Chicago. In that talk I'm going to discuss the role of technical writing and the role of information architecture. These skill sets are going to be in greater demand today than they ever have been, and will continue to be as these technologies evolve.

Don't get fooled by the hype and inflated expectations. At the end of the day, this is about using content to understand customers and meet their needs. Finding the right words to do this will often depend on the professional technical writer. These individuals, whose significance is often obscured by the latest technology, are important now and will be even more so in the future.

Don't get fooled by the smoke and mirrors and hype and inflated expectations.

To get started, technical writers should begin by working with the marketing organization to:

1. Understand and map out the customer lifecycle;
2. Identify the points in the lifecycle where the customer needs to accomplish an objective;
3. Deconstruct this objective into a finer-grained journey that illustrates the customer's wants, needs, thoughts, emotional state, and tasks along with the content and information the customer requires to get to the next step to achieve their objective;
4. Identify the sources of content and data and how they will be accessed;
5. Determine the best channel to that content—whether human, a website, a mobile device, etc.;
6. Evaluate the state of the content and restructure it to answer specific, common, high-value questions;
7. Map out the possible questions that the customer may have at each step and structure dialog to prompt the correct question;
8. Test on actual customers;
9. Use human-bot hybrid learning to train the bot;
10. Provide points of human escalation; and
11. Measure, manage, govern, and improve.

Obviously, there's much more detail than I can cover here, but this is the broad framework. From there, it's a matter of committing the resources to complete every step and understanding how to implement each of the elements above by working with technical and customer experience teams. The role of the technical writer is increasingly vital to successful implementation of emerging AI and chatbot technologies.

For more information on the role of Information Architecture, see "There's No AI without IA," *https://www.infoq.com/articles/artificial-intelligence* and "The Problem with AI," *https://www.infoq.com/articles/problem-with-ai* from *IT Professional Magazine*.

SETH EARLEY (seth@earley.com) *is CEO of Earley Information Science (EIS). He also serves as editor and data analytics for* IT Professional Magazine *from the IEEE. Seth has a long history of industry education and research in emerging fields. His current work covers cognitive computing, knowledge engineering, data management systems, taxonomy, ontology, and metadata governance strategies. Seth has worked with a diverse roster of Fortune 1000 companies, helping them to achieve higher levels of operating performance by making information more findable, usable, and valuable through integrated enterprise architectures supporting analytics, e-commerce, and customer experience applications.*

Analytics and Personalized Content: The Doorway to AI in Training

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By ODED ILAN

Predicting the Future

An AI god will emerge by 2042 and write its own bible. Will you worship it? —*John Brandon*

HISTORICALLY, PREDICTING THE FUTURE was a craft that belonged in the realms of magic and religion. Whether you were reading bones or stars, stuck inside a whale, or speaking in tongues, seers and prophets had great power. People live in apprehension of what may be, and who wouldn't want to know the turn of a business deal, the arrival of fortune, or how attractive their spouse will be?

Over time, science gradually replaced magic. As the credibility of science grew, belief in the supernatural waned and skepticism replaced blind faith in the power of prediction.

But despite what many people believe today, predicting the future isn't always about magic. Just like science allows us to regrow limbs, fly to the heavens, and read minds, today we can calculate probability and once again predict the future. *Probability* (or *predictive analytics*) is the ability to collect enough data to be able to identify behavior patterns and predict future similar patterns.

Figure 1. The Pitya at the oracle of Delphi in action

With a lot of experience, good soothsayers could look at people and "read their minds." The more people they met, the better they became at it. In just the same way, the more data you have, the more reliable your predictions will be. Mega-corporations like Google and Facebook, which have access to incalculable amounts of user data, have long since taken the lead in predicting user preferences, targeting them with additional content in order to monetize this data.

In this article, we'll take a look at some of the more accessible ways content and training teams can leverage user behavior analytics for delivering accurate content that will help improve training and onboarding results.

Personalization Is Taking over Digital Interactions

The most common and effective use of user data is for creating *personalized content*. I'm referring to content in the widest sense of the word: social networks, advertising platforms, micro-learning platforms, e-commerce platforms, and much more.

Social networks are getting better at delivering organic or paid content based on what the reader previously engaged with. If I often "Like" or comment on Walmart's Facebook page, I'm more likely to respond to their promoted ads. Those patterns will eventually dictate the content that comes in our Facebook, Twitter, and Instagram feeds, allowing these companies to target us with correlating content.

Now let's put predictive analytics into an even more advanced mode: Let's say that 73 percent of Walmart's Facebook page visitors also like to buy at Macy's; Macy's could use Facebook's algorithms to automatically target every new Walmart page viewer, predicting a 73 percent chance that this would be beneficial for them!

The distinction between paid and organic content on social platforms is becoming more and more blurred. What makes that possible is the razor-sharp targeting based on personalized preferences. When we are engaged with what we read, we're more inclined to become immersed in it and even more enthusiastic about paying to stay at that level of engagement and interest.

The same goes for micro-learning. By its nature, micro-learning is designed to be bite-sized assistive content (see figure 2). This medium's purpose is to blend seamlessly into existing products and make learning seem like an organic part of the product experience. In micro-learning, words are chosen carefully, because any wrong turn may result in the user losing patience and wandering off the page. Personalized content can turn an otherwise average learning experience into a stellar training session that wins the user over.

These small bites, viewed by and engaged with by numerous trainees, create a huge amount of data. Countless bits of data can be cross-referenced with other training data and, with additional user information and using analytics, can provide predictive understanding about future training and support needs.

Getting It Just Right: Personalized Training

So how do we go about delivering perfectly tailored content that would guarantee users' engagement? How do we apply that to training environments?

First, we must start compliling a database of recorded user actions. Each user activity is aggregated and added to the equation. We need to understand which actions were attempted, where users got stuck, and which actions were completed. Once this data is collected, we add to our "magic" cauldron as much user information as we can get our hands on: role, position, history of usage in the product. Even level of technical savviness.

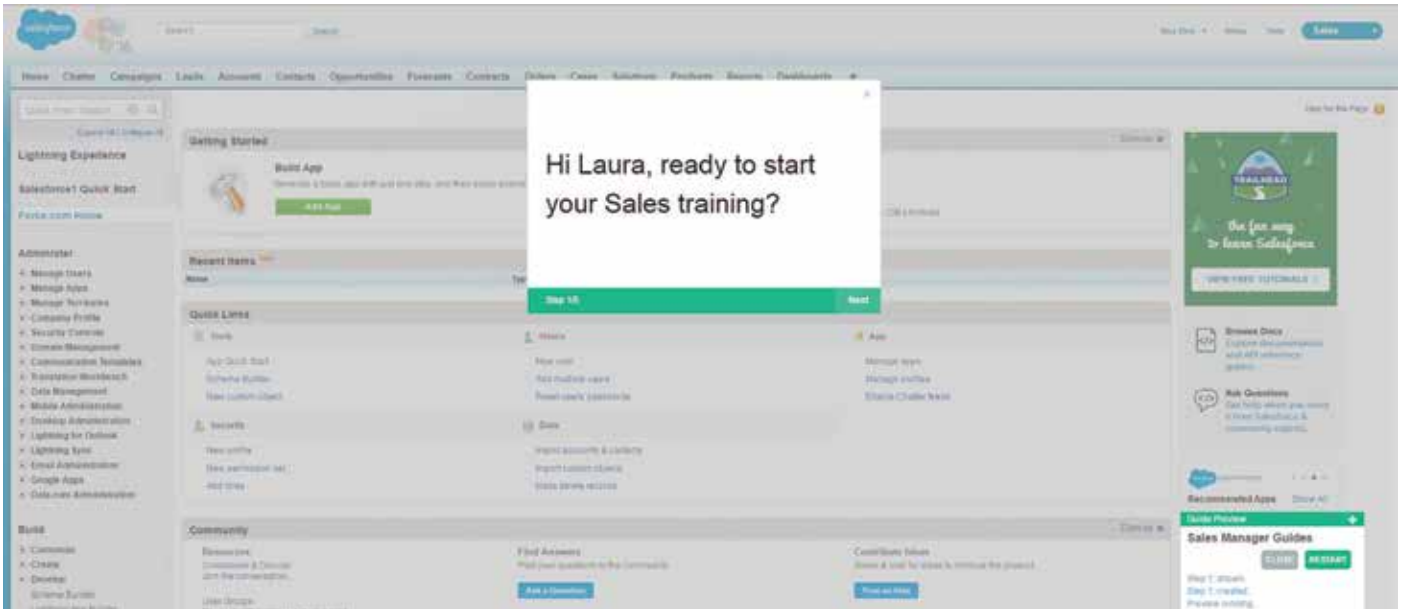


Figure 2. Personalized micro-training

Key points to remember:

- While each user is unique, each is also part of the whole, and the whole is built of countless users.
- While each user is unique, each can also be classified via "types," "sub-types," "sub-sub-types," and so on.
- Predictive analysis is based on understanding what most users of certain types prefer.
- The more data we have (the more people and actions), the better we get at predicting activities and needs.

More powerful software and hardware can contain and manage huge amounts of data, sift through them quickly, and glean meaning from it all. As these systems get more complex—reviewing huge amounts of information from billions of users with hundreds of billions of activities—their ability to second guess your next need/action will come close to perfection.

With all that data at our fingertips, we can easily predict which assistive content would most appeal to the user, what would be just-in-time help, and what they would find most engaging. Once we deliver that content, we can measure the level of engagement and repeat or correct, according to the success stats.

Best Practices for Training Evaluation

Deciding what to do with the data can be quite challenging, but getting your hands on it can also be challenging. There are plenty of tools out there to help you gather information on user behavior. The trick is to know which ones to combine for best results.

To get the right data, we first need to understand what we're looking for. Identifying user behavior on Web-based products means tracking user actions by pre-set goals and events, for instance, clicking "submit" in certain forms, completing certain fields, and creating certain elements. Goals need to be things an analytics tool can track: buttons, fields, time spent on a page, and elements viewed.

For a visualization of user behavior in your platform, the best option is session recording, like what Hotjar does. You can record and then play and inspect user sessions in your product. This is a terrific way to identify usability issues, figure out which calls to action (CTAs) are less effective and in which workflows users are getting stuck. Hotjar also offers heat-maps, reflecting which areas are clicked more.

Now that We Have the Data, What Can It Tell Us?

Tracking user interaction with those elements can tell you a lot about two things: product limitations and the user's level of engagement with the product.

Product limitations can be identified only by accumulating enough user data to indicate a pattern. If a critical mass of users are having a hard time completing a certain task, that may mean it's time to revisit the user experience design. Users don't always recognize the root of issues they are having, and less tech-savvy users may default to assuming the problem is with their skill rather than the product.

User engagement, on the other hand, is analyzed individually by user. Low user engagement can be the result of the user's uncertainty as to the technology or lack of proper training. Optimally, your analytics platform would be able to do both: aggregate large amounts of user data *and* break down individual user activity history. Figure 3 shows an example, from Iridize's analytics platform, of two separate data sets that complete each other to show the full circle of user behavior data.

In that regard, user analytics can help change and even redefine supportive content, by offering insights into how users are interacting with your product from multiple angles, highlighting the perspective you need.

Figure 3a. Dashboard showing user data on Iridize's analytics platform.

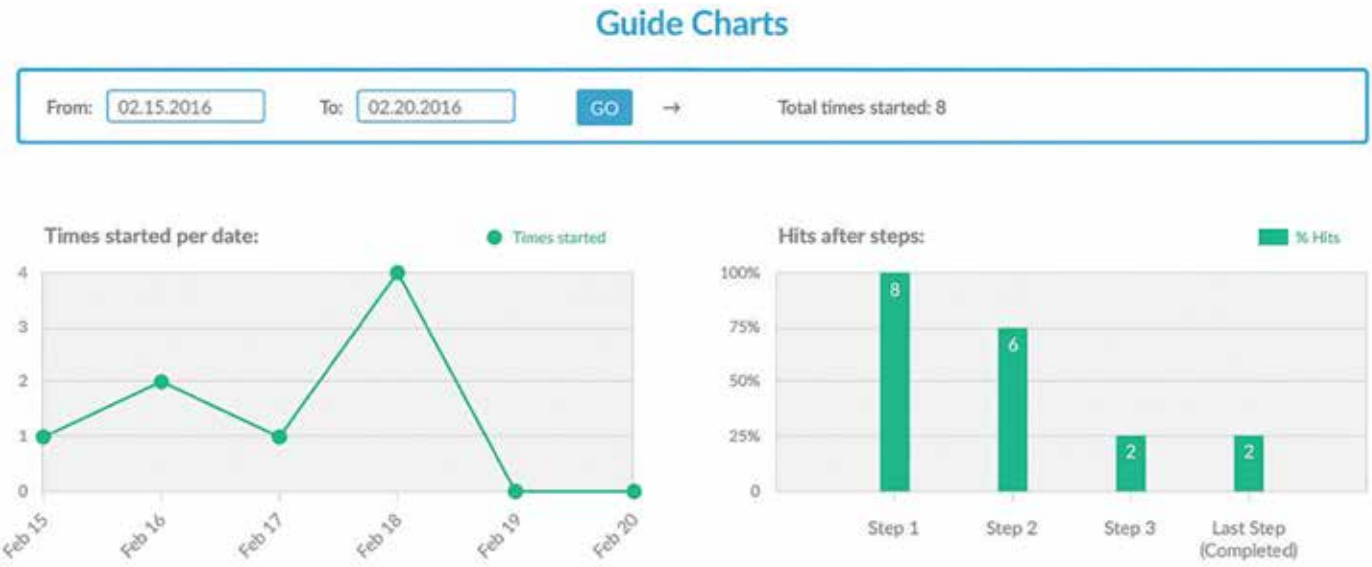


Figure 3b. Dashboard showing user data comparison on Iridize's analytics platform.

Summary

Many solutions allow you to monitor user behavior, parse their activities, and analyze them, but real evaluation is to continuously see how customers acted after the training over a span of time, how often they needed additional support, and how quickly they mastered the various tasks.

Predicting user behavior only has meaning if we can deliver the content that improves the user's experience. Today, we have the tools and capabilities to personalize that content in a way that creates a truly seamless user experience.

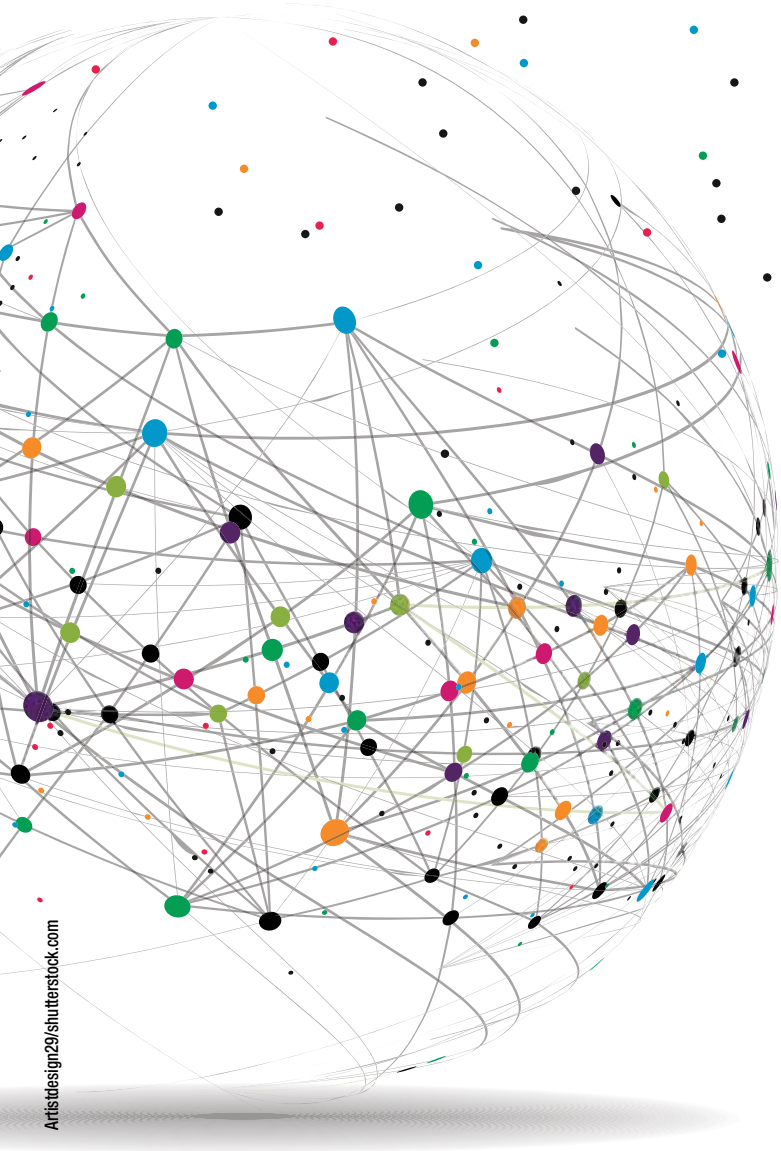
What's next?

- We've collected user behavior, parsed it, and combined it with additional information to makes sense of it all.
- We allowed our platforms to review this information and developed algorithms that, based on the rules we generate, will provide users with additional content.
- Now we are ready for the next big leap—letting the system *learn* user behavior from the analytics and *understand* that behavior in order to generate new content—and that's where artificial intelligence steps in.

ODED ILAN (oilan@iridize.com) *is the Chief Marketing Manager of Iridize and brings to the company over 20 years of industry experience. Oded oversees all the strategic marketing and sales activities of Iridize, directing the company's messaging and offering to ensure Iridize makes the most of its potential as a leading product. Oded has a very hands-on approach, often doing simple sales calls with customers to ensure he is very close to the customers and understand their needs. Oded is a well-regarded speaker and thought leader in the field of employee onboarding and training and is often invited to write for publications and speak at prestigious events.*

Delivering Global Content: An Imperfect Science

By ANNIK STAHL



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ONE CANNOT LOOK at the future of tech comm without seeing we are moving into a global economy, and with that comes globalized content. Let's look at some of the challenges and rewards inherent in writing for a global audience.

When people who are competent, adroit, and artistic at crafting words need to talk about translation effectiveness and quality, there are bound to be disagreements. Throw in some translation machine logic along with the folks who created the feature or product, and you've got the perfect storm. There is currently a lot of "blaming" going on between various players in the global content development chain:

- Translation reviewers often criticize source content with no measureable evidence of actual defects.
- Translation vendors, who review machine translations, nominate the lack of terms in a terms database as the source of translation issues.
- Developers and program managers charge that source writers, translators, and reviewers are taking up too much valuable time and energy (because it just seems so easy to do in their minds).

As the need for translated and localized content grows exponentially each year, separating content development from localization is troublesome in several regards. What makes sense in American English may translate into something completely unreadable and incomprehensible to a Japanese audience. Even professional localizers sometimes have a hard time deciphering the true intent of the content, causing a lot of back-and-forth between teams, cutting into efficiencies, and causing partial or even complete rewrites of the original content.

This article addresses the challenges to providing quality and consistent content that translations pose as we continue to expand, connect to, and communicate with the world at large.

Internationalizing at the Source

In the past, "source writers" weren't always referred to as such; they were writers and editors who wrote the parent version of a topic, article, or training module and then handed it off to a localization team or maybe to a machine translation company and then … promptly forgot about it, moving on to the next thing. The onus was on the receiving end: it was up to the translators and localizers to parse the true meaning and intent of the content. Simply writing source content that suits the source audience and handing it off for machine translation, localization, or both, is not solving the problem of writing to a global audience in a scalable, reliable, and resourceful way.

While translating and localizing steps and processes are fairly straightforward objectives, it's the nuances and ambiguous language that can change a help topic from something of quality in English to something mystifying in another language. What needs to happen is *internationalization*, the process of designing and writing content to facilitate localization for target audiences that vary in culture, region, or language. When you start with ideas (in the form of easily translated and localized words, phrases, and formatting) that make sense in all languages, you get consistency, accuracy, and efficiency.

While interesting language makes for engaging content, writers are encouraged to write internationalized English in order to facilitate quality translation and localization. It sets the groundwork for simpler translation and localization processes. But again, will all content feel essentially whitewashed and sterilized in the name of efficiency and scalability?

The trick is finding a balance between perfectly internationalized content and perfectly engaging content. The tools and tactics that can help are: 1) style guides (not just the *Strunk and White* variety) which must be developed and enforced, with buy-in from team members on both sides of the ocean; 2) a way to measure feedback from customers on how translations are working for them; and 3) machine learning. It takes a village to write for the global village.

Measuring Quality Versus Helpfulness

When it comes to measuring the impact of words, the science is not there yet. Beautiful, fluid writing may end up being just that: beautiful and fluid, but also useless and confusing. Translated words that are "correct" may be *correct*, but perhaps *less* correct when out of context with the words around it. Even perfectly translated content may not get the point across to the end user since context changes with language and location. The ingredients are there, but no one is sure how to work the oven.

When we talk about providing translated content to a global audience, we need a way to measure the success of that translation. While vendors of machine-translated content provide us with the Linguistic Quality Assurance (LQA) score, teams need to figure out how to measure the usefulness and quality of content that post-machine translation reviewers offer. "Satisfaction ratings" that customers provide are not telling the whole story; organizations need to find a way to gather deeper insights.

Maybe the quality of some machine jobs is "good enough" for the least-viewed content. For the rest of the content (the most-viewed stuff), we use post-machine editors to localize it, and to review the translation. But does that tell the whole story of "helpfulness?" And if source editors (and managers) don't speak the languages being translated/localized, how do they assess performance and quality? Teams need to develop a mechanism to measure what's most useful, most effective, and most germane to what the end user is trying to understand and accomplish.

Looking Forward by Working Backward

We need to consider *customers* first and determine what they need, instead of thinking about what we already know. The work schedule needs to start and end with our customers. Step A: What do they need? Step Z: Are they getting it? When all of us are so close to the content, it's hard to take a step back and consider how to share our knowledge with people who aren't necessarily like us, who don't experience the world in the same way we do.

Great leaders—politicians, artists, teachers, writers, scientists, philosophers—make their living and spend their time thinking outside of themselves. It would behoove us to do the same as we work to improve the methods and processes we put in place to deliver quality worldwide content.

ANNIK STAHL (annikstahl@gmail.com) *has worked as a writer, editor, and content strategist in the tech industry for nearly 20 years. For 10 years she was the voice and face of the* Microsoft Crabby Office Lady, *a humor/tech/advice column, blog, podcast, book, and series of videos targeted to Microsoft customers. After Crabby "retired," Annik brought her skills and passion for explaining the hard stuff to Amazon, where she's currently a content manager on the Marketplace team, supporting the company's millions of worldwide third-party sellers.*

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2018 STC Election Final Slate

THE STC NOMINATING COMMITTEE (composed of members Jamie Gillenwater, Larry Kunz, Rick Lippincott, Becky Todd, and Chair Adriane Hunt) is pleased to announce the final slate of candidates for the 2018 Society election:

President

Jane Wilson will automatically succeed from the office of Vice President

Vice President

Pam Brewer
Ben Woelk

Secretary

Kirsty Taylor

Director

(two positions to be elected)

Ramesh Aiyyangar
Alisa Bonsignore
Todd DeLuca
Mak Pandit

Nominating Committee

(two positions to be elected)

Jackie Damrau
MK Grueneberg
Li-At Rathbun

Congratulations to the candidates, and thanks to all STC members who expressed interest in running for office. Note that the final slate was prepared in accordance with the current Society bylaws. The Society election is scheduled to open on 26 February and close on 9 March 2018. To be eligible to vote, members must have paid their dues by 1 February 2018.

STC Announces Andrea Ames as the Next Editor of *Intercom*

STC IS PLEASED to announce that Andrea Ames has agreed to serve the technical communication community as *Intercom* magazine's new Executive Editor. "We are very excited to bring Andrea onboard as editor of *Intercom*. She impressed the members of the search committee with her enthusiasm for the editorship and her strong vision for the magazine," said CEO Liz Pohland. "As outgoing editor, I feel very confident in passing the reins to Andrea, because she has global technical communication and content strategy experience, has wide contacts within the industry, and is admired by the STC membership for her contributions to the Society. In addition, she already has some terrific ideas for the 2018 editorial calendar."

Andrea had this to say about her new position:

> I'm honored to be asked and thrilled to accept the Executive Editorship of *Intercom*. Already a very valuable source of information for STC members, I see *Intercom* becoming even more vital to the larger technical communication industry, which is really exciting to me! Liz and the STC staff, with input from the *Intercom* advisory committee, have already taken the magazine to amazing heights, and they will be a tough act to follow.
>
> In 2018, I hope to leverage that great work and perhaps explore some topics in more depth or maybe some topics that haven't been covered before. I'm lucky to have a few exceptional guest editors lined up already, and I want to bring some new voices to the magazine, to STC, and to the technical communication industry.
>
> I hope everyone will take a look at the Editorial Calendar (see p. 5) and consider contributing an article in 2018. I also hope that everyone will find something new and intriguing, as well as valuable, in the upcoming year's issues.

Andrea is a Content Experience Strategist and Founder and CEO of Idyll Point Group, where she advises and assists executives and managers to build content organizations that have measurable business impact, as well as providing content strategists with apprenticeship-style coaching to develop the skills to lead businesses in content strategy. She is also a Certified Online Training Professional and the curriculum designer and Program Chair for the UCSC Extension in Silicon Valley certificate program in technical writing and communication, where she teaches content design and architecture, human factors, and usability courses.

Andrea is a Fellow and past President of STC, a Distinguished Engineer of the ACM (the first content professional to achieve this distinction), a Senior Member of the IEEE, and a member of numerous other professional associations.

When she's not advising content leaders or teaching technical writers, Andrea teaches quilt making and design, kayaks, SCUBA dives, and walks her dogs—typically while binging on podcasts and audio books. You can reach Andrea on Twitter @aames, LinkedIn at *https://www.linkedin.com/in/andreaames/*, her website *www.IdyllPointGroup.com*, or via email at *intercom@stc.org*.

Please join us in warmly welcoming Andrea as the next *Intercom* editor!

Student Volunteerism: The Future of STC

BY BETHANY AGUAD | *STC Member* and **ALEXANDRA ENGRAND** | *Student Member*

HERE IN THE ORLANDO Central Florida (OCF) STC Chapter, we connect with the theme for the 2018 STC Summit: *Communicate the Future.* As STC celebrates a glowing 65-year past and takes a peek at the future of the profession, our chapter looks to one of our greatest strengths: student volunteerism. By volunteering for STC, students grow into valuable members of the Society. They also make connections, develop key technical communication competencies, and become more employable upon graduation. By engaging these talented students, STC gains future leaders who will ensure the Society innovates, grows, and thrives over the coming years. The award-winning OCF Chapter owes much of its success to a continuous pipeline of young talent from the nearby University of Central Florida (UCF).

UCF has an active English/Technical Communication program. Professors in the program prepare the students for entering the field not only through their coursework, but also by providing job and internship announcements for students. In addition, a professor in the English Department serves as the faculty advisor for UCF's Future Technical Communicators (FTC) club. He supervises meetings and helps advertise FTC to his students, many of whom are in technical fields like tech comm and IT.

Because of the partnership between FTC and OCF, we have a consistent student presence at our monthly meetings. Here, students are able to meet and mingle with other professional technical writers and communicators in the Orlando area. This presents future internship and job opportunities, as well as learning experiences. OCF's monthly meetings normally consist of a guest speaker presenting on their expertise. For example, one meeting hosted an employment panel where attendees could ask questions about applications, interviews, and the general hiring process. Students are welcome to attend and are able to gain new insights and knowledge about the world of technical communication through these meetings.

Here in Orlando, we recognize that much of our success is the product of this long partnership between chapter and university through our successful student mentoring program. Every year, OCF, in conjunction with UCF, pairs veterans from the front lines of the industry with talented technical communication students. The mentoring program enables skilled mentors to help, support, guide, and give advice where needed to their mentees. Now in its 15th year, the mentoring program continues to pursue its primary goal: to bridge the gap between industry and academia.

Over the decades, many of our student mentees have gone on to assume leadership positions within the chapter. Several veteran community leaders are in the process of handing the reins of chapter leadership over to the next generation of technical communicators. We believe that these rising stars hold the future of the community—and, on a larger scale, the Society—in their hands.

As we look to the future, what could be more appropriate than to engage with talented young STC leaders who will help forge that future? If you know a gifted student, encourage them to attend the 2018 STC Summit in Orlando so they can be engaged and learn. If you are a student, this is your chance to meet with experienced professionals in the Society, in addition to other students at the premier conference for technical communication education and networking. At the Summit, the experience and advice from tech comm professionals will synergize with the fresh ideas and enthusiasm of our students to benefit not only STC communities, but also the Society as a whole.

Orlando Central Florida Chapter event

In a World Enabled by Artificial Intelligence, Technical Content Should Become Agentive, Not Remain Assistive: An Interview with Christopher Noessel

BY SCOTT ABEL | *STC Senior Member*

INTERACTION DESIGN EXPERT Christopher Noessel envisions a world in which smart machines and content can perform tasks for our prospects and customers. In this installment of Meet the Change Agents, Scott Abel, The Content Wrangler, asks Noessel to share with us his thoughts on artificial intelligence (AI), assistive versus agentive solutions, and the future of technical communicators in a world of AI-powered automation. Read this interview for a peek at the potential impact of moving from our tradition of providing content solutions that help people accomplish work toward content solutions that perform work for people.

Scott Abel: Christopher, tell us a little about yourself and your work.

Christopher Noessel: I'm the Global Design Practice Manager for Travel and Transportation industries with IBM, bringing IBM Design goodness to products and clients. In that role, I teach and speak about—and evangelize—design internationally. My "spidey-sense" goes off semi-randomly, leading me to investigate and speak about a range of things from interactive narrative to ethnographic user research, interaction design to generative randomness, and designing for the future.

I am the co-author of *Make It So: Interaction Design Lessons from Science Fiction* (Rosenfeld Media, 2012), co-author of *About Face: The Essentials of Interaction Design* (4th ed., Wiley, 2015), keeper of the blog *scifiinterfaces.com*, and author of *Designing Agentive Technology: AI That Works for People* (Rosenfeld Media, 2017).

SA: *Designing Agentive Technology: AI That Works for People* is an important work that I believe is one of the

In the digital age, change happens quickly. This column features interviews with the movers and shakers—the folks behind new ideas, standards, methods, products, and amazing technologies that are changing the way we live and interact in our modern world. Got questions, suggestions, or feedback? Email them to *scottabel@mac.com*.

most valuable books written in the information design and customer experience sector in a long time. Can you tell our readers what agentive technology is and how it relates to AI?

CN: Think of a hammer. Think of a steam shovel. Think of a computer. Each of these is a tool a person can use to get things done. For the better part of the last century, we've been getting good at making more and more complicated tools. We've learned a lot along the way, and accomplished many things, too.

Using a tool isn't the only way to get things done. In the age of narrow artificial intelligence, we can hand off tasks to an agent and have it do the work how we'd like it done, whenever it should be done, until further notice. That lets you—and your customers—get on with other things. Designing a tool for you to use to do work is different than designing the AI that does the work for you. If you only know how to design hammers, or even just computers, well, you're behind.

I should explain that narrow AI is a term of art to describe the smart-but-not-human-smart artificial intelligence that we have in the world today: Things like chatbots and voice-enabled personal and home assistants like Apple Siri and Amazon Echo belong in the narrow AI category.

The speculative AI that can generalize and think like a human is appropriately called "general AI," and while I'm interested in that, there's little to do about it today as a designer. We may have to wait another 25 to 50 years before we get there.

SA: How did you come to want to write about this subject? Did you have an a-ha moment that led you to this subject?

CN: I was working on the design of a roboinvestor. That's an agent to which you describe your financial goals, current holdings, and monthly contributions, and it invests and continually watches your portfolio to rebalance and alert you both when a stock is tanking or something is taking off that you're not taking advantage of. It was such a rich problem, and felt so different, that midway through I thought, "I should look up some best practices around designing for this sort of thing." I couldn't find anything and thought, "Well, damn. Someone should write a book about this." Then there was a pause. Then, "I guess I should write a book about this."

So, I wrote a book about it.

SA: In general, is it fair to describe most technical communication products (user guides, FAQs, online help, and other types of product documentation) as assistive? And, if so, why? What might we do to make technical communication agentive?

CN: Yes. Assistive AI helps you perform a task while your attention is on the task. Things like finding a signal in noise, getting an answer to a question or help understanding, parsing through advice and predictions. To make technical communication products agentive, you'd want to think about how that content can be used when the user isn't paying attention to the related product. We can use agents to monitor the situation on our behalf, waiting patiently for changes to the product that will affect the way they work, or the content sources they typically rely on. Then we'd equip the agent to monitor the data streams, and then act if and when appropriate. Next, we'd equip the user with the capability to modify the triggers and behaviors of the agent, allowing them to personalize their experience with it.

SA: In your book, you identify four questions we should ask in order to determine whether a solution should be assistive, automated, or agentive. Can you help us understand these?

CN: The first bit is "Given a computable task that recurs," and that's important. If it's not computable, it's outside the domain of any AI, and needs to be a manual tool. That said, I rarely run across problems that aren't in some way computable. Similarly, if the problems don't recur, it's not worth the effort to computize them. Not until we get to general AI that can handle *sui generis* problems.

OK, to the questions:

1. Can it be delegated? For some problems, we might not want to ethically or legally hand off a problem to a computer. Liability might be another reason. For these cases, we should offer assistance to a human performing the task.
2. Is there a measurable trigger? For an agent to do its thing, it has to be watching a data stream for a trigger. That trigger can be many things: like a keyword, a time, a valence, a percentage of confidence. But if the trigger can't be confidently detected by a computer, then an agent can't know when to do its thing, in which case we should provide a connection to a human who can.
3. Is the user the focus of the task? Does it require human input? There are some tasks which humans shouldn't be bothered with because they're too mundane, too technical, or too critical. Think of an automated door (too mundane) or a pacemaker (too critical). These technologies don't need a human as part of their regular flow, and so can be automated.
4. I should also note that there is a fourth mode of interest, and that's manual. There are times when the user may want or need to work with a tool without any AI involved at all. Any given product or service needs to elegantly and smartly shift between these modes—Manual, Assistive, Agentive, and Automatic.

SA: My research shows that some knowledge workers fear that artificial intelligence and related technologies will cause widespread unemployment in the content creation, management,

translation, and delivery arenas. What do you think about these emerging technologies? Will they present new job opportunities for professional communicators, or will they replace us?

CN: It's one of the two questions I always get when speaking, and rightly so. Technology has always changed jobs and marketplaces. I'm not an expert in the content field, but yes, language is computizable, and I don't see an easy solution to the market forces at play.

But how we deal with AI as organizations and as a society is up to us. Hopefully most organizations will follow IBM's goal of human augmentation rather than human replacement. But that's just a hope, and if it goes the other way, we'll need to have smart ways to retrain workforces and to rethink our social safety nets. My work in this area has led me to be a big believer in Universal Basic Income.

Editor's Note: *For those unfamiliar with the term Universal Basic Income, it's a form of social security in which all citizens or residents of a country receive regularly an unconditional sum of money, either from the government or another public institution, independent of any other income they may earn or receive. Universal Basic Income is discussed in relation to the fear that artificial intelligence capabilities will result in widespread replacement of human workers—a 2013 University of Oxford study estimates 47% of U.S. jobs may be at risk within the next two decades because of advances in artificial intelligence and automation. Learn more: "Why Free Money for Everyone Is Silicon Valley's Next Big Idea." (June 29,* fortune.com)

SA: What's the first step technical communicators should take to learn how to determine whether their customers could benefit from agentive content or not (aside from reading your book, which I am already planning to recommend)?

CN: Ha. Yes. Read the book, of course. Then ask yourself, "What are we asking our customers to do that we could be doing for them, in persistent and hyper-personalized ways?" Also, find out, "Where are they bored?" And do first-hand research to ask them yourself because that will point you to where agentive modes of interaction might be implemented for the better.

SA: Well, I'm afraid we're out of space, Christopher. Anything else you'd like to share with our readers as a closing thought?

CN: I've opened channels of communication about this topic on Facebook, Twitter, and Slack, and I'm hoping to build a community of practice to refine these ideas as well as collect case studies. Join if you can. Thanks for allowing me to share my views with your readers. If your readers have questions for me, they can reach me at *chrisnoessel@gmail.com.*

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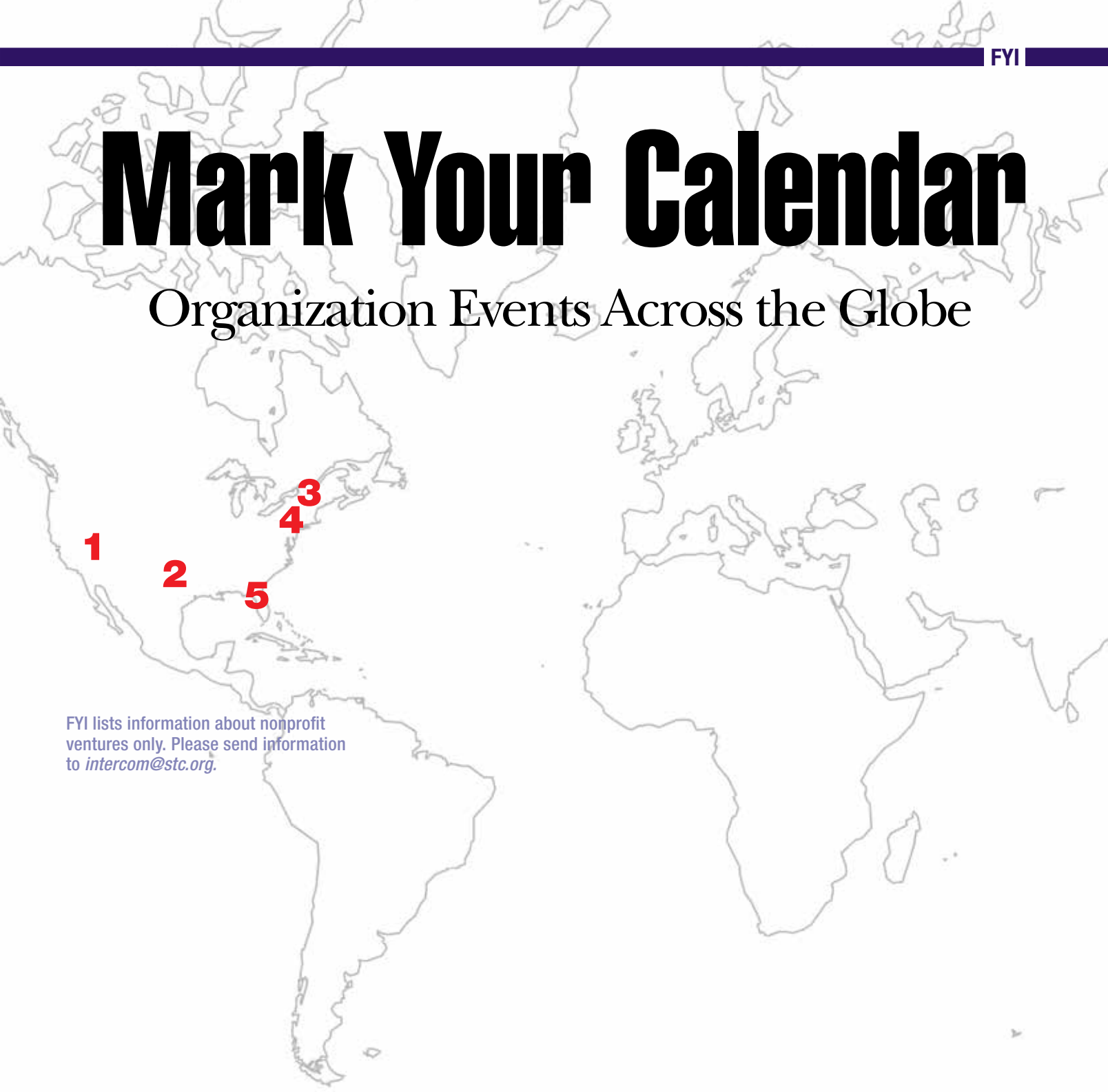

FYI lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 22-25 Jan
The **Annual Reliability and Maintainability Symposium** (RAMS) will be held 22-25 January 2018 at the Silver Legacy Resort and Casino in Reno, NV.
RAMS
http://www.rams.org/
rams2018@rams.org

2 15-19 Feb
The **American Association for the Advancement of Science** (AAAS) annual meeting will be held 15-19 February 2018, at the Austin Convention Center in Austin, TX.
AAAS
http://meetings.aaas.org/
meetings@aaas.org

3 25-27 Mar
The annual **Spectrum STC Rochester Conference** will be held 25-27 March 2018, at the Rochester Institute of Technology, Rochester, NY. This year's theme is "Hack Into Your Flow."
STC Rochester
http://stc-rochester.org/spectrum/
spectrum @stc-rochester.org

4 6-7 Apr
The annual **Conduit STC-Philadelphia Metro Chapter Mid-Atlantic TechComm Conference** will be held 6-7 April 2018, at the Giant Conference Center in Willow Grove, PA.
STC Philadelphia Metro Chapter
http://www.stcpmc.org/conferences/conduit-2018/
conference@stcpmc.org

5 20-23 May
The **65th Annual Technical Communication Summit and Expo** will take place 20-23 May 2018 at the Hyatt Regency in Orlando, FL, with a theme of "Communicate the Future."
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* STC-related event

Nonprofits Need Technical Communicators, Too

BY ALLEN BROWN | *STC Member*

NONPROFITS CHAMPION many causes, including hunger, healthcare, education, public policy, legal aid, and the performing and fine arts. I work as Managing Director of Operations for the Bridges from School to Work program of the Marriott Foundation for People with Disabilities (MFPD), a family foundation established in 1989. The mission of this organization is to transform the lives of young adults with disabilities through the power of the job, and it has been succeeding in this endeavor for 27 years; the program has served more than 22,000 participants.

Our organization specializes in something known as school-to-work transition. MFPD's Bridges program employs approximately 70 staff members who help young adults in ten major U.S. cities prepare for, interview for, obtain, and retain real jobs that pay real wages.

Although my role is more that of a manager than a practicing technical communicator, I look for any chance I can to apply what I've learned from my technical communication studies. I design, write, and edit job descriptions, policies, procedures, job aids, reports, decision trees, flow charts, communiqués, and marketing collateral, including content for blogs, social media channels, and our website.

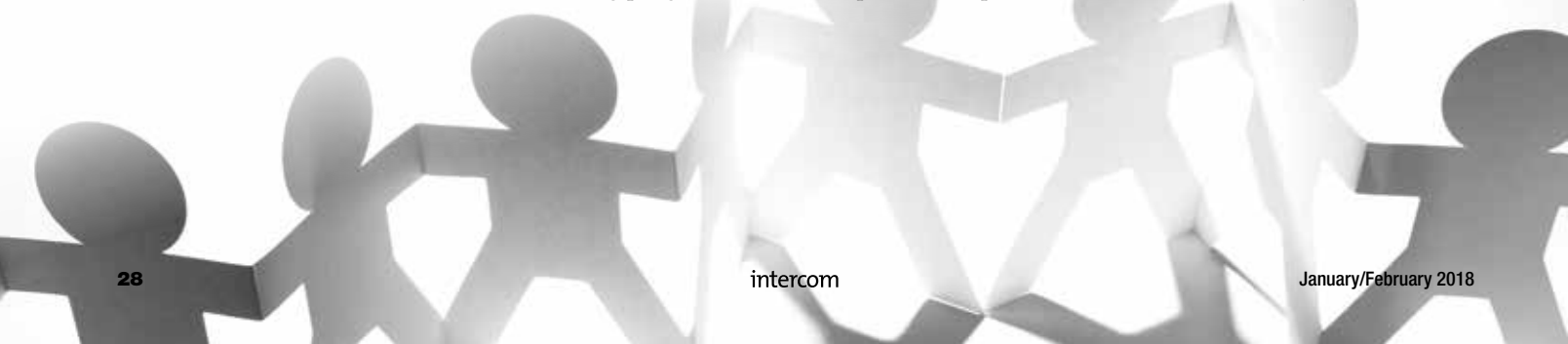
In the past two years, I have learned about a genre new to me, the case statement, which is a form of marketing communication that nonprofit organizations produce to promote the value of their work—and to interest potential funders in awarding grants. Drafting and fine-tuning a case statement can take months of effort and revisions before the message is on target. A well-crafted case statement tells compelling stories and underscores the value and brand promise of a nonprofit organization and its mission.

I never received formal training to write grants or proposals; I learned on the job. Before I joined MFPD, I worked for Marriott's welfare-to-work training program, Pathways to Independence. I was one of the authors of a $3.5 million Department of Labor grant that we won, and once we got it, I was its project director, administering the grant in cities across the country. And once you win a grant, particularly one awarded with public monies, complying with its bureaucracy can be even more onerous than the process of applying for it.

Those with an aptitude for effective technical communication can apply their skill to writing grants and proposals. Technical communicators are organized, inquisitive, detailed, analytical, diplomatic, perceptive, and adept at simplifying complex information and presenting it elegantly and persuasively. Furthermore, technical communicators are often masters of managing projects and of marshalling the efforts and expertise of SMEs and other contributors.

If you're interested in the convergence of nonprofits, grant writing, and technology, a couple of good resources include the Foundation Center (*foundationcenter.org*) and the Nonprofit Technology Network (*nten.org*). Some of the resources on these websites are free, but some require a paid membership or subscription. When it comes to websites, there's no shortage of blogs about grant writing and nonprofits, many of which are informative, although some mask themselves as blogs while actually peddling fee-based grant-writing services. You can also learn about grant and proposal writing through any number of university courses, including those that confer academic credit, continuing education credit, or certificates.

Nonprofit organizations, whether doing grassroots work on tight budgets or reaching thousands with recognized brand names, remain vital to communities. Nonprofit organizations produce both tangible and intangible benefits that improve the human condition, including advocating for social change, shaping public policy, enlightening or entertaining subscribers, or providing daily living essentials for those in impoverished communities. Whatever their mission, nonprofit organizations can benefit as much from the specialized skills of technical communicators as can for-profit enterprises in business and industry.



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STC Summit Pre-Conference Courses (half day)	3
STC Annual Summit	8
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